



MOZAMBIQUE

POPULATION-BASED HIV IMPACT ASSESSMENT

INSIDA 2021

INSIDA

Mozambique Population-based HIV Impact Assessment

The Mozambique Population-based HIV Impact Assessment (PHIA), INSIDA 2021 was a household-based national survey conducted between April 2021 and February 2022 to measure the impact of the country's national and provincial HIV response. INSIDA 2021 included adults, defined as those aged 15 years and older, offered HIV counseling and testing with return of results and collected information about uptake of HIV care and treatment services. In addition, the survey estimated national HIV incidence as well as the national and provincial HIV prevalence among adults and the prevalence of viral load suppression (VLS), defined as HIV RNA <1,000 copies per milliliter among adults living with HIV. The results of INSIDA 2021 provide information on national and provincial progress toward control of the HIV epidemic.

INSIDA 2021 was led by the Government of Mozambique through the National Institute of Health (INS), in collaboration with the Ministry of Health (MISAU), the National AIDS Council (CNCS), and the National Institute of Statistics (INE). The survey was conducted with funding from the United States (US) President's Emergency Plan for AIDS Relief (PEPFAR) with technical assistance from the US Centers for Disease Control and Prevention (CDC), and ICAP at Columbia University. The implementation of INSIDA 2021 also included support from the Government of Mozambique and from the Provincial and District Health Services and Directorates, Health Units, and local and community authorities. The Government of Mozambique and national and international development partners participated in the National Executive Committee and Technical Working Groups during the survey development and implementation.

KEY FINDINGS

HIV Indicator	Women	95% CI	Men	95% CI	Total	95% CI
Annual incidence (%)						
15-49 years	0.72	0.34-1.10	0.23	0.00-0.47	0.48	0.25-0.71
15 years and older	0.61	0.29-0.93	0.24	0.02-0.46	0.43	0.23-0.63
Prevalence (%)						
15-49 years	15.4	14.2-16.6	9.0	7.9-10.1	12.4	11.4-13.4
15 years and older	15.0	13.9-16.1	9.5	8.5-10.6	12.5	11.5-13.4
Viral load suppression (%)						
15-49 years	66.0	62.2-69.7	53.8	48.0-59.5	61.8	58.5-65.1
15 years and older	67.1	63.4-70.8	58.8	53.8-63.9	64.1	60.9-67.4

Viral load suppression is defined as HIV RNA <1,000 copies per milliliter among all HIV-positive adults.

Annual incidence of HIV among adults (aged 15 years and older) in Mozambique was 0.43%. HIV incidence was 0.61% among women and 0.24% among men.

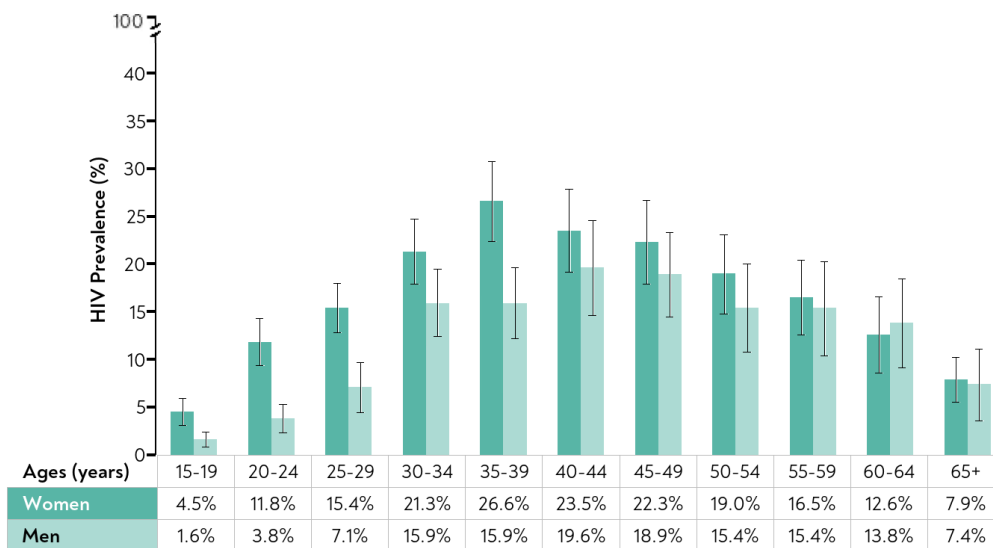
Prevalence of HIV among adults in Mozambique was 12.5%, which corresponds to approximately 2,097,000 adults living with HIV. Prevalence of HIV was higher among women (15.0%) than among men (9.5%).

Prevalence of VLS among adults living with HIV in Mozambique was 64.1%: 67.1% among women and 58.8% among men. Note, these estimates of VLS are among all adults living with HIV regardless of their knowledge of HIV status or use of antiretroviral therapy (ART).

See ins.gov.mz or phia.icap.columbia.edu for more details.



HIV PREVALENCE AMONG ADULTS



Error bars represent 95% CIs.

HIV PREVALENCE, by AGE and SEX

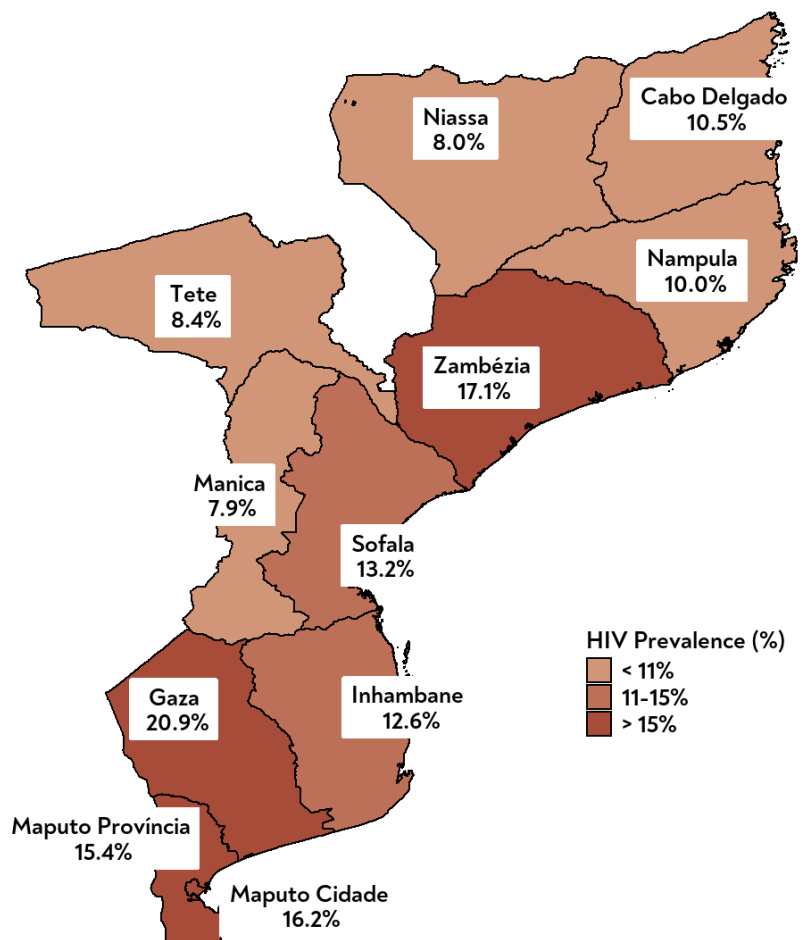
Among women, HIV prevalence ranged from 4.5% in those aged 15-19 years up to 26.6% in those aged 35-39 years. Among men, it varied from 1.6% among those aged 15-19 years up to 19.6% among those aged 40-44 years.

HIV prevalence was two to three times as high among women as among men in the age groups between 15-29 years.

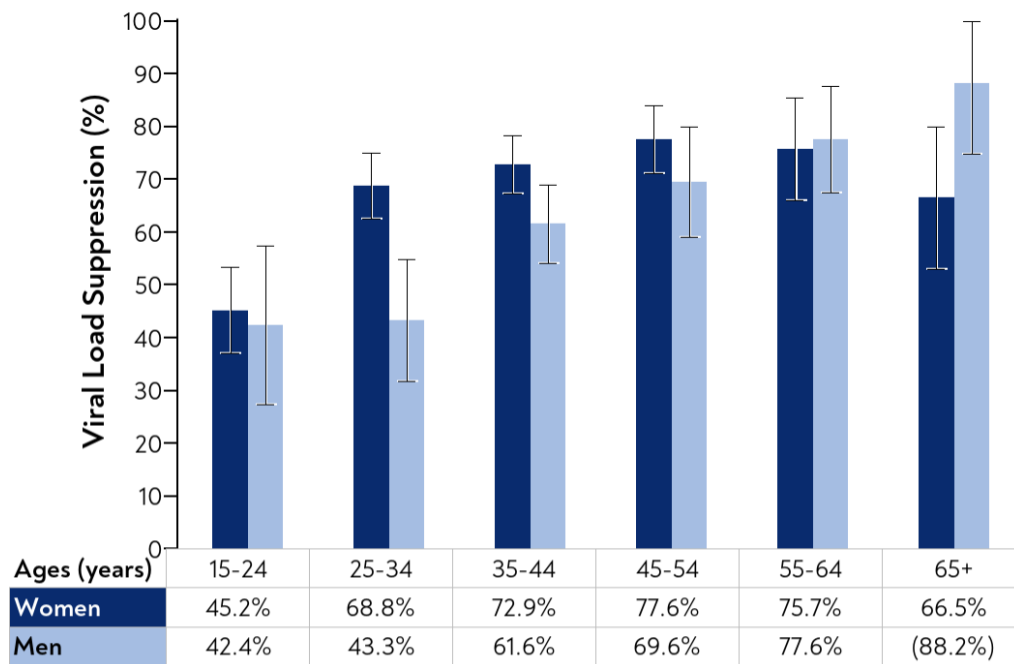
HIV PREVALENCE, by PROVINCE

HIV prevalence among adults aged 15 years and older ranged from 7.9% in Manica up to 20.9% in Gaza. HIV prevalence in Maputo Província (15.4%), Maputo Cidade (16.2%), Zambézia, (17.1%), and Gaza (20.9%) was markedly higher than in Manica (7.9%), Niassa (8.0%), Tete (8.4%), Nampula (10.0%).

National	HIV Prevalence (%)	95% CI
Mozambique	12.5	11.5-13.4
Provincial		
Niassa	8.0	5.3-10.7
Cabo Delgado	10.5	7.2-13.8
Nampula	10.0	7.4-12.5
Zambézia	17.1	13.0-21.2
Tete	8.4	6.7-10.1
Manica	7.9	6.0- 9.8
Sofala	13.2	9.9-16.4
Inhambane	12.6	10.5-14.7
Gaza	20.9	16.7-25.0
Maputo Província	15.4	13.3-17.5
Maputo Cidade	16.2	13.7-18.7



VIRAL LOAD SUPPRESSION AMONG ADULTS LIVING WITH HIV



Error bars represent 95% CIs.

Estimates based on a denominator between 25 and 49 are included in parentheses and should be interpreted with caution.

VIRAL LOAD SUPPRESSION, by AGE and SEX

Among adults (ages 15 years and older) living with HIV in Mozambique, VLS prevalence varied by age. Among women, the prevalence of VLS ranged from 45.2% among those aged 15-24 years up to 77.6% among those aged 45-54 years.

Among men, less than half of those aged 15-24 years and 25-34 years had suppressed viral loads (42.4% and 43.3%, respectively). VLS prevalence peaked at 88.2%* among those 65 years and older.

In the age group 25-34 years, men had a substantially lower rate of viral load suppression when compared to women.

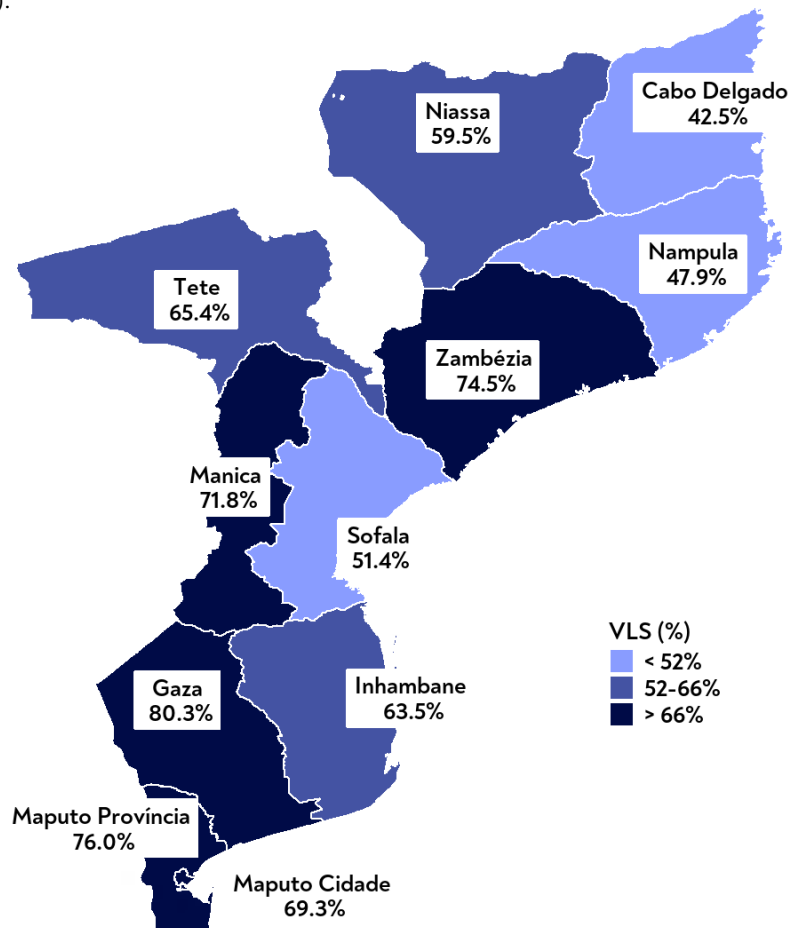
* Please note the estimate was based on between 25 and 49 survey participants and should be interpreted with caution.

VIRAL LOAD SUPPRESSION AMONG ADULTS LIVING WITH HIV, by PROVINCE

The prevalence of VLS varied considerably from a low of 42.5% in Cabo Delgado to a peak of 80.3% in Gaza. The VLS prevalence in Cabo Delgado (42.5%), Nampula (47.9%), and Sofala (51.4%) were substantially lower compared to the prevalence in Maputo Cidade (69.3%), Manica (71.8%), Zambézia (74.5%), Maputo Província (76.0%), and Gaza (80.3%).

National	VLS Prevalence (%)	95% CI
Mozambique	64.1	60.9-67.4
Provincial		
Niassa	59.5	44.1-74.8
Cabo Delgado	42.5	27.7-57.2
Nampula	47.9	37.6-58.3
Zambézia	74.5	68.8-80.2
Tete	65.4	57.2-73.6
Manica	71.8	64.9-78.6
Sofala	51.4	45.8-57.1
Inhambane	63.5	53.8-73.1
Gaza	80.3	69.9-90.6
Maputo Província	76.0	67.6-84.4
Maputo Cidade	69.3	62.1-76.5

VLS=viral load suppression.

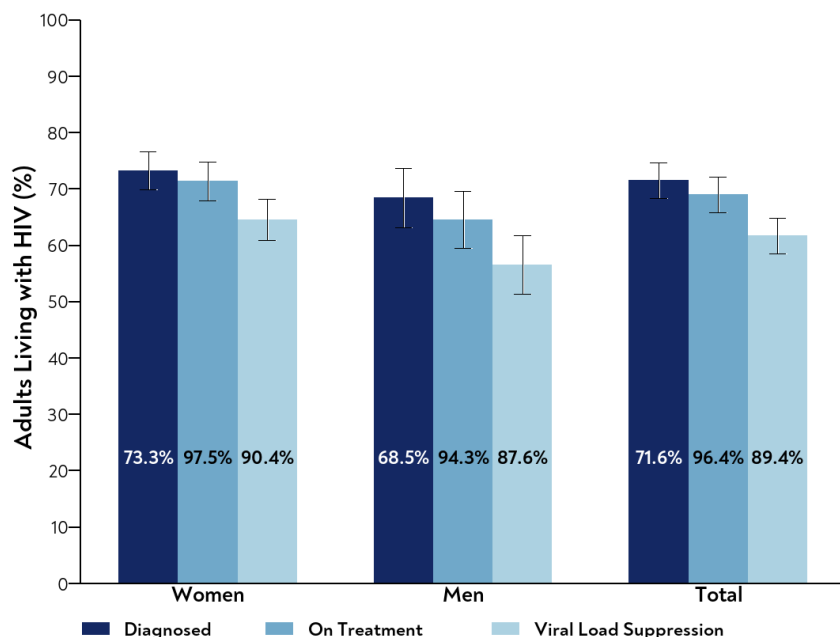


ACHIEVEMENT OF THE 95-95-95 TARGETS AMONG ADULTS LIVING WITH HIV

95-95-95: Treatment targets to help end the HIV epidemic

The Joint United Nations Programme on HIV/AIDS (UNAIDS) set the 95-95-95 targets with the aim that by 2025, 95% of all people living with HIV will know their HIV status; 95% of all people diagnosed with HIV will receive sustained ART; and 95% of all people receiving ART will have VLS.

ACHIEVEMENT OF THE 95-95-95 TARGETS, by SEX



Percentages shown in the graph refer to the conditional 95-95-95 targets described in the text above and to the right. The heights of the bars represent the unconditional (overall) percentages for each indicator among all people living with HIV. Error bars represent 95% CIs.

Diagnosed: In Mozambique, 71.6% of adults (aged 15 years and older) living with HIV were aware of their HIV-positive status: 73.3% of women and 68.5% of men. Individuals were classified as aware if they reported their HIV-positive status or had a detectable antiretroviral (ARV) in their blood.

On Treatment: Among adults living with HIV who were aware of their positive status, 96.4% were on ART: 97.5% of women and 94.3% of men. Individuals were classified as being on ART if they reported current ART use or had a detectable ARV in their blood.

Viral Load Suppression: Among adults who were on ART, 89.4% had suppressed viral loads: 90.4% of women and 87.6% of men.

CONCLUSIONS

- One out of eight adults in Mozambique are living with HIV—which represents a substantial challenge for the country's health system. These results demonstrate the need to strengthen the implementation of HIV prevention measures to reduce the number of new infections.
- There are marked differences in HIV prevalence at the provincial level, as well as by age and sex.
- Achieving VLS is a challenge in almost all age groups for both sexes, especially among women aged 15 to 24 years and men aged 15 to 34 years. In addition, the data show substantial provincial variability with respect to VLS. These results offer the opportunity for greater focus on support for HIV and treatment literacy, adherence support, monitoring for drug resistance, and other strategies to improve viral load suppression.
- With regards to the 95-95-95 targets, Mozambique has already reached the 95% treatment target for people living with HIV who know their status; however continued efforts are needed to reach the targets for awareness of HIV status and VLS.

RESPONSE RATES AND HIV TESTING METHODS

Of 8,998 eligible households, 96.5% completed a household interview. Among 19,912 eligible adults (11,098 women and 8,814 men), 14,488 (8,255 women and 6,233 men) were interviewed and tested for HIV. When accounting for enumeration area and dwelling unit response, 96.3% and 88.0% respectively, the overall response rate for adults was 59.5%: 60.8% for women and 57.8% for men.

HIV prevalence testing was conducted in each household using a serological rapid diagnostic testing algorithm based on Mozambique's national guidelines, with laboratory confirmation of seropositive samples using a supplemental assay. For confirmed HIV-positive samples, laboratory-based testing was conducted for quantitative evaluation of viral load and qualitative detection of ARVs (atazanavir, lopinavir, efavirenz, and dolutegravir). A laboratory-based incidence testing algorithm (HIV-1 limiting antigen-avidity assay with correction for viral load and detectable ARVs) was used to distinguish recent from long-term infection. Incidence estimates were obtained using the formula recommended by the World Health Organization Incidence Working Group and Consortium for Evaluation and Performance of Incidence Assays. Survey weights were utilized for all estimates.